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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,596	04/30/2001	Robert Miller	IBM/177	3237

7590 05/11/2005  
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EXAMINER

NANO, SARGON N

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/845,596

Applicant(s)

MILLER ET AL.

Examiner

Sargon N. Nano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04Apr2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This action is responsive to the application filed on April 30 , 2001 . Claims 1 – 27 are pending examination.

2. ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claim 1- 27 are rejected under 35 U.S.C. 102(e) as being anticipated by chung et al., Patent No. 6,470,389

As to claim 1, Chung teaches a method of accessing a group in a clustered computer system, wherein the clustered computer system includes a plurality of nodes, and wherein the group includes a plurality of members resident respectively on the plurality of nodes, the method comprising:

(a) receiving an access request on a first node in the plurality of nodes, wherein the access request identifies a cluster-private group name associated

with the group (see col. 7 lines 13 – 37 , Chung discloses that a client sends a request with URL to a cluster server); and

(b) processing the access request on the first node to initiate a group operation on at least a subset of the plurality of nodes that map to the cluster-private group name ( see col.7, lines 38 – 52, Chung discloses address of a server is determined to route the request to be processed)).

As to claim 2, Chung teaches the method further comprising generating the access request with a user job resident on the first node (see col.7, lines 38 – 52).

As to claim 3, Chung teaches the method further comprising forwarding the access request to a clustering infrastructure resident in the first node via a call from the user job (see col.7, lines 38 – 52).

As to claim 4, Chung teaches the method further comprising:

(a) generating the access request with a user job resident on a second node in the plurality of nodes; and

( b) processing the access request with a proxy job resident on the second node by communicating the access request to the first node ( see col.7, line 62 – col. 8 line 15).

As to claim 5, Chung claims the method wherein the proxy job is a member of a cluster control group, the method further comprising:

(a) forwarding the access request from the user job to the proxy job ;  
and

(b) forwarding the access request from the proxy job to a clustering infrastructure resident in the second node via a call from the proxy job ( see col.7, line 62 – col. 8 line 15).

As to claim 6, Chung teaches the method further comprising retrieving the cluster-private group name with a user job by accessing a cluster-private data structure (see col.8, lines 16 - 48).

As to claim 7, Chung teaches the method wherein the cluster-private data structure is resident on the same node as the user job (see col.8, lines 16 - 48).

As to claim 8, Chung teaches the method wherein the cluster-private data structure is accessible only from the node upon which the cluster-private data structure is resident (see col.8, lines 16 - 48).

As to claim 9, Chung teaches the method wherein the cluster-private data structure is accessible only by jobs that are resident on the node upon which the cluster-private data structure is resident (see col.8, lines 50 – col. 9 line 23).

As to claim 10, Chung teaches the method wherein initiating the group operation comprises distributing messages to a plurality of group members resident on the nodes that map to the cluster-private group name. (see col.9, lines 23 – 50).

As to claim 11, Chung teaches the method wherein initiating the group operation further comprises accessing a group address data structure to retrieve a plurality of network addresses associated with the cluster-private group name, wherein distributing messages to the plurality of group members includes sending a message to each of the plurality of network addresses (see col.9, lines 23 – 50).

As to claim 12, Chung teaches the method wherein initiating the group operation is performed by a clustering infrastructure resident on the first node (see col.9, lines 23 – 50).

As to claim 13, Chung teaches the method wherein initiating the group operation includes retrieving with the clustering infrastructure plurality of addresses that are mapped to the cluster-private group name in a data structure that is local to the clustering infrastructure (see col.9, lines 23 – 50).

As to claim 14, Chung teaches the method wherein initiating the group operation includes locally resolving on the first node a mapping between the cluster-private group name and a plurality of addresses associated with at least the subset of the plurality of nodes (see col. 7 lines 15 – col.8 line 51) .

As to claim 15, Chung teaches an apparatus comprising:

(a) a memory accessible by a first node among a plurality of nodes in a clustered computer system(see col. 7 lines 13 – 37 and fig. 4) ; and

(b) a program resident in the memory and executed by the first node, the program configured to access a group that includes a plurality of members

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resident respectively on the plurality of nodes by receiving an access request that identifies a cluster-private group name associated with the group, and processing the access request to initiate a group operation on at least a subset of the plurality of nodes that map to the cluster-private group name (see col. 7 lines 13 – 37).

As to claim 16, Chung teaches the apparatus further comprising a user job configured to generate the access request (see col.7, lines 38 – 52).

As to claim 17, Chung teaches the apparatus wherein the program comprises a clustering infrastructure resident on the first node (see col.7, lines 38 – 52).

As to claim 18, Chung teaches the apparatus further comprising a proxy job configured to forward the access request from the user job to the clustering infrastructure (see col.8, lines 16 - 48).

As to claim 19, Chung teaches the apparatus further comprising:

(a) a cluster-private data structure configured to store the cluster-private group name(see col. 7 lines 13 – 37); and

(b) a user job configured to access the cluster-private data structure to retrieve the cluster-private group name and generate the access request therefrom (see col.7, lines 38 – 52).

As to claim 20 Chung teaches the apparatus wherein the cluster-private data structure is resident on the same node as the user job(see col. 7 lines 13 – 37).

As to claim 21 Chung teaches the apparatus wherein the cluster-private data structure is accessible only from the node upon which the cluster-private data structure is resident(see col.8, lines 16 - 48).

As to claim 22, chung teaches the apparatus further comprising a group address data structure configured to store a plurality of network addresses associated with the cluster-private group name, wherein the program is configured to initiate the group operation by accessing the group address data structure to retrieve the plurality of network addresses and sending a message to each of the plurality of network addresses (see col.4, lines 45 – 63).

As to claim 23, Chung teaches the apparatus wherein the program comprises a clustering infrastructure, and wherein the group address data structure is local to the clustering infrastructure (see col.8, lines 50 – col. 9 line 23).

As to claim 24, Chung teaches the apparatus wherein the program is further configured to process the access request by locally resolving on the first node a mapping between the cluster-private group name and a plurality of addresses associated with at least the subset of the plurality of nodes ( see col.7, lines 38 – 52).

As to claim 25, Chung teaches a clustered computer system, comprising:



(a) a plurality of nodes coupled to one another over a network (see fig. 4);

(b) a group including a plurality of members resident respectively on the plurality of nodes and

(c) a program resident in a first node among the plurality of nodes and configured to access the group by receiving an access request that identifies a cluster-private group name associated with the group, and processing the access request to initiate a group operation on at least a subset of the plurality of nodes that map to the cluster-private group ( see col.7, lines 38 – 52)

As to claim 26 Chung teaches a program product, comprising:

(a) a program resident in the memory and executed by a first node among a plurality of nodes in a clustered computer system, the program configured to access a group that includes a plurality of members resident respectively on the plurality of nodes by receiving an access request that identifies a cluster-private group name associated with the group, and processing the access request to initiate a group operation on at least a subset of the plurality of nodes that map to the cluster-private group name(see col. 7 lines 13 – 37; and

(b) a signal bearing medium bearing the program (see col.3 lines 29 – 58).

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As to claim 27, Chung teaches the program product wherein the signal bearing medium includes at least one of a transmission medium and a recordable medium (see col.3 lines 29 – 58).

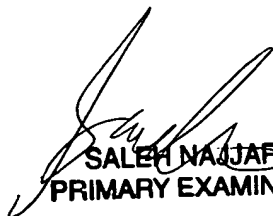
### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sargon N. Nano whose telephone number is (571) 272-4007. The examiner can normally be reached on 8 hour.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sargon Nano  
May 4, 2005

  
SALEH NAJJAR  
PRIMARY EXAMINER